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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,451	04/24/2001	Leslie E. Mace	4502US	5355
24247	7590	04/24/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			NASSER, ROBERT L	
			ART UNIT	PAPER NUMBER
			3735	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/841,451

Applicant(s)

MACE ET AL.

Examiner

Robert L. Nasser Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,10-21,75,76,79-85,88,101,102 and 104-125 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-6,8,10-21 and 104-125 is/are allowed.
- 6) ☒ Claim(s) 75, 76, 79-85, 88, 101-102 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 75-76, 79-85, 88, and 101-102 are rejected under 35 U.S.C. 103(a) as being anticipated by Anderson et al 4440177 in view of Kofoed et al and Orr et al. With respect to claim 75, Anderson et al 4440177 has a respiratory monitoring device with a housing 10 having a bore, a flow sensor 66 communicating with the bore and a first and second detectors 74 and 80. The flow sensor is a differential pressure flow sensor. It does not detect the first and second substances without removing the gas from the housing. However, Kofoed et al shows an alternate method of sensing carbon dioxide, by shining infrared light through a transparent housing. As such, it would have been obvious to modify Anderson et al to use the measurement scheme of Kofoed, as it is merely the substitution of one known equivalent measurement technique for another. In addition, the carbon dioxide sensor of the combination is an infrared sensor with a source and detector communicating through two windows on opposite sides of the flow path. The oxygen sensor of the combination is not a luminescence quenching sensor. However, Orr et al teaches that a luminescence quenching sensor is a known oxygen measuring sensor. Hence, it would have been obvious to modify Anderson et al in view of Kofoed et al to use a quenching sensor, as it is merely the substitution of one known

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sensor for another. The examiner notes that since the oxygen and carbon dioxide measurements are made simultaneously, the would need to communicate to the flow path through separate channels. The exact arrangement of the sensors would have been a matter of design choice for one skilled in the art. With respect to claims 79 and 80, there are many "seats" in the housing, i.e. areas which can receive a transducer and they can orient the transducer in any desired direction. Applicant might overcome this rejection by reciting the transducer in combination with the seat, and include the desired orientation. Claim 82 is rejected in that, as stated above, there are a plurality of "seats" in the housing and the seats can orient the sensor in any desired direction. Claims 101 and 102 are rejected for the reasons given above.

Claims 1, 2, 4-6, 8, 10-21, and 104-125 are allowable.

Claims 1, 2, 4-6, 8, 10-21 define over the art of record in that none of the art shows the second detection component on a portion of the window, as claimed. Claims 104-125 define over the art of record in that none of the art teaches the recited arrangement of pressure ports.

Claims 78 and 100 define over the art of record in that none of the art has the first window and second windows oriented in different directions. Claims 80, 87, 101 and 103 define over the art of record in that none of the art has the seat arranged to orient the sources in the manner recited.


Applicant's arguments filed 1/19/2006 have been fully considered but they are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser Jr. whose telephone number is 571 272-4731. The examiner can normally be reached on 9:30 - 6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenberg can be reached on 571 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RLN  
April 18, 2006

  
ROBERT L. MASSEE  
PATENT EXAMINER